

**Lesson Plan**  
**2<sup>nd</sup>-3<sup>rd</sup> grade class**

# The Doorbell Rang

**Materials Needed:**

The Doorbell Rang book  
Small paper plates  
Paper cookies  
Scissors

By Pat Hutchins

Greenwillow Books 1986

**Mathematical Goals:**

The students will explore the concept of division with small numbers in an engaging and familiar context. Students may write a division number sentence that matches the sharing they do with the cookies. As the lesson progresses, students will use fractions to deal with leftover cookies when sharing.

**GLCE's addressed by this lesson:**

**N. MR.02.16** Given a situation involving groups of equal size or of sharing equally, represent with objects, words, and symbols; solve.

**N.ME. 02.19** Recognize, name, and write commonly used fractions.

**Brief Description of the Lesson:**

We will begin by reading the story together, stopping as each new group of children arrives to predict what will happen and then to act out the sharing of cookies using paper plates and paper cookies. We will keep track of the different ways of sharing on paper or the whiteboard (12 cookies shared between 2 children gives each child 6 cookies; 12 cookies shared among 4 children gives each child 3 cookies; 12 cookies shared among 6 children gives each child 2 cookies; 12 cookies shared among 12 children gives each child 1 cookie). If students are comfortable with the division symbol, we will also write number sentences/equations that fit each scenario.

At the end of the story, Grandma arrives with a tray of cookies. The cookies are arranged in an array (very small and hard to see, though). A good extension question is to ask students how many cookies Grandma brought and then write a multiplication and/or division number sentence that matches that scenario.

Once the story is over, we will explore other cookie sharing options. For example, the story jumps from 2 children to 4 children and then to 6 children to 12 children. How could we share the cookies if we had 3 children (4 cookies each) or 8 children ( $1\frac{1}{2}$  cookies each) or 9 children ( $1\frac{1}{3}$  cookies each). I plan to skip 5, 7, and 10 children since sharing the leftover cookies is not as easy. I will have enough paper cookies made that we can use scissors to cut up the leftover cookies and share them with the children for each of these problems.

Alternatively, we could pick another number of cookies and children and do sharing scenarios (4 children sharing 6 cookies, 4 children sharing 5 cookies, 8 children sharing 9 cookies...) In either case, we want to write the fractions we create and discuss what information the numerator and denominator give us about the fraction. It is also important to discuss how we always need to break the cookies into equal pieces.

**Possible Extensions:**

At the end of the story, Grandma brings more cookies. We could determine how many cookies were on Grandma's tray and then share that larger number of cookies among different numbers of children. We could also explore division as making equal groups by taking Grandma's cookies and putting 6 on a plate to share with neighbors and seeing how many plates we could fill.